

AMENDMENTS TO THE CLAIMS

Claims 1-19 (Canceled)

Claim 20 (Currently Amended) A method for preparing a biosensor chip comprising two groups of polymers expressed by the following general formula (I) which are linked onto the sensor chip surface via the A-moiety present at one end of said polymers:

general formula (I)



in which

A stands for HS- group,

L₁ stands for a first linker or valence bond,

L₂ stands for a second linker or valence bond,

X stands for hydrogen, a functional group, protected functional group or ligand,

p is an integer of 2 - 12, and

n is an integer of, on the average, 10 - 10,000,

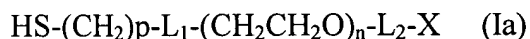
in which one group of said polymers have an integer, n, as an average value, of 50-10,000

and the other group of said polymers have an integer less than that of said one group by at

least 10,

which comprises,

(A) a step of contacting an aqueous solution of said one group of polymers expressed by a general formula (Ia):



in which L₁, L₂, X, p and n have the same significations to those as defined as to the general formula (I),

with the sensor chip surface of a metal selected from the group consisting of gold, silver, copper and aluminum, under the conditions sufficient to link a prescribed amount of said polymer to said metallic surface, and thereafter washing away the unlinked polymer.;

(B) a step of subsequently contacting an aqueous solution of said other group of polymers of

by at least 10, with the metallic surface which has undergone the above step A, under the conditions sufficient to link said polymer to said surface, and thereafter washing away the unlinked polymer; and

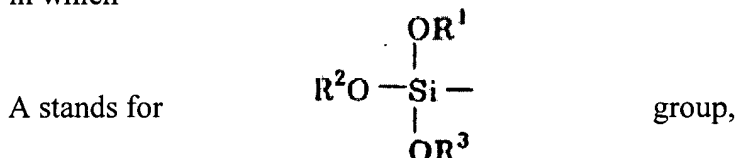
(C) repeating a step similar to the above step (B) with so obtained surface plural times.

Claim 21 (Currently Amended) A method for treating the surface of a material selected from the group consisting of glass, semi-conductor, ceramic, metal oxide and alloy oxide, where two groups of polymers expressed by the following general formula (I) are linked onto the surface via the A-moiety present at one end of said polymers:

general formula (I)



in which



where R^1 , R^2 and R^3 each independently stands for C_1 - C_6 alkyl,

L_1 stands for a first linker or valence bond,

L_2 stands for a second linker or valence bond,

X stands for hydrogen, a functional group, protected functional group or ligand,

p is an integer of 2 - 12, and

n is an integer of, on the average, 10 - 10,000,

in which one group of said polymers have an integer, n, as an average value, of 50-10,000 and the other group of said polymers have an integer less than that of said one group by at least 10,

which comprises

(A) a step of contacting an organic solvent solution of said one group of polymers expressed by a general formula (Ib):

in which R^1 , R^2 , R^3 , L_1 , L_2 , X , p and n have the same significations to those as defined as to the general formula (I),

with said material under the conditions sufficient to adhere or link a prescribed amount of said polymer to the surface of said material, distilling the solvent off, and washing away the unlinked polymer;

(B) a step of subsequently contacting an organic solvent solution of said other group of polymers of the general formula (Ib) which have an integer less than that of the polymer in step (A) by at least 10, with the surface which has undergone the above step (A) under the conditions sufficient to adhere or link said polymer to said surface, then distilling the solvent off and washing away the unlinked polymer; and

(C) repeating a step similar to above step (B) with so obtained surface plural times.

Claims 22-24 (Canceled)